

# 24-Port 10/100Mbps + 4G TP / SFP Combo Layer 3 Managed Ethernet Switch



To fill the demand of Layer 2 (Data Link) and Layer 3 (Network) multi-layer applications from enterprises and campuses, PLANET releases the new generation Layer 3 24-Port 10/100Mbps plus 4G TP/SFP Combo Layer 3 Managed Ethernet Switch, WGS3-2840.

The PLANET WGS3-2840 equips with 24-Port 10/100Mbps with 4 Gigabit TP/SFP Combo interfaces plus the powerful Layer 2 management functions / Layer 3 routing feature. Its 24 10/100Mbps and 4 Gigabit TP ports support Auto-Negotiation for optimal speed detection through RJ-45 Category 5/5e or 6 cables. All the ports support Auto-MDI/MDI-X that can automatically detect the types of connection to any Ethernet devices without requiring special straight or crossover cables. The 4 SFP interfaces together with 4 Gigabit TP ports by default, shared with port 25 to port 28. With the PLANET mini-GBIC fiber-optic module installed, it offers incredible extensibility, flexibility and connectivity to the other core switches or servers.

For universal demand and application of Layer 2, the PLANET WGS3-2840 provides high effective management functions, such as per port disable / enable, speed duplex, flow control settings, bandwidth control and per port Ethernet traffic statistics for counter. To improve the performance of entire network environment, the PLANET WGS3-2840 provides IEEE 802.1d Spanning Tree and IEEE 802.1w Rapid Spanning Tree function. For optimal LAN connection and diagnose between two node switch devices, the link aggregation is the ideal solution and it supports up to 12 link aggregation groups.

For network security enhance, the PLANET WGS3-2840 provides 512 IEEE 802.1Q VLAN groups to segment the port-based networks and the static MAC address / MAC address filtering function and comprehensive Access Control List (ACL) for enforcing security to the edge as well. For network Ethernet traffic analysis, the PLANET WGS3-2840 provides port mirroring function to monitor the traffic on its Ethernet ports, and it also equips with QoS features to enhance services offered by telecoms. This function provides priority queues per port for different types of traffics, allowing administrators to set policies for classified filtering and rule-based rate limitation.

Designed to offer the guaranteed IP Layer 3 routing with RIP, OSPF and DHCP relay function support, the WGS3-2840 empowers the performance of pure IP-based network easier than ever. The IGMP snooping function helps to build a multimedia networks like video-conference and etc.

With its built-in Web-based management, the PLANET WGS3-2840 offers an easy-to-use, platform-independent management and configuration facility. The PLANET WGS3-2840 supports standard Simple Network Management Protocol (SNMP) and can be managed via any standard-based management software. For text-based management, the WGS3-2840 can also be accessed via telnet method and the console port.

For easier to configure multiple WGS3-2840 with the same setting in a short time, the PLANET WGS3-2840 provide current configuration backup / restore function. It also provides new firmware upgrade through the Web interface for enhancing the performance of the WGS3-2840.

**Data Sheet** 



# **KEY FEATURE**

#### Layer 2 Features

- The 10/100Base-TX ports support auto-sensing and auto-negotiation
- Provides wire speed of Layer 2 switching performance
- Supports up to 16K MAC address entries
- IEEE 802.3x Flow Control for Full-Duplex mode and Back-Pressure of Half-Duplex mode
- Provide Store-and-Forward forwarding scheme
- Provides Broadcast storm protection
- Supports IGMP snooping
- Supports 802.1Q Tagged VLAN for dynamic VLAN Management,
  512 VLAN groups support
- Supports Spanning Tree Protocol with IEEE 802.1d STP and IEEE 802.1w RSTP
- Link Aggregation bandwidth gathering supports 12 link aggregation groups, 12 link aggregation groups
- Provides Port Mirror (many-to-1)
- Bandwidth control on each port
- ARP configuration support

# **IP Routing Features**

- IP Routing protocol supports RIP v1/v2, OSPF protocol
- Routing interface provides Per-Port routing and VLAN routing mode

# **Multicast Routing Features**

• Supports IGMP Snooping

# Security

- User/Password protected system management
- L2/L3/L4 ACL (Access Control List)
- Static MAC address and MAC address filtering function
- MAC address learning function
- MAC address aging-time function

#### Quality of Service

- IEEE 802.1p based on CoS
- IP TOS/Precedence and DSCP based on CoS
- 8 priority queues per port
- Policy based on DiffServ per port
- Supports for strict priority and Weighted Round Robin (WRR) CoS policies

#### Management

- Provides 1 male DB9 RS-232 console interface
- Supports Command Line Interface switch management
- Supports Web management for switch
- Supports SNMP switch management
- Supports DHCP relay function
- Supports software and configuration upload/download via Ethernet connection
- Supports Ping and telnet function
- Supports RMON groups 1, 2, 3, 9



# **SPECIFICATION**

Product	24-Port 10/100Mbps TP + 4-	-Port Gigabit TP/ SFP Cor	nbo Layer 3
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Managed	Etherne <sup>*</sup>	t Switcl
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WGS3-2840 Model **Hardware Specification** 24 RJ-45 Auto-MDI/MDI-X ports 10/100Base-TX Ports 10/100/1000Base-T Ports 4 RJ-45 Auto-MDI/MDI-X ports SFP/mini-GBIC Slots 4 SFP interfaces Switch Architecture Store-and-Forward Switch Fabric 12.8Gbps Capacity Switch Throughput 9.5Mpps 16 K MAC address table with Auto learning function Address Table Layer 3 Routing Table 4 K MAC address table **Buffer Memory** 32MB Back pressure for Half-Duplex , IEEE 802.3x Pause Frame for Full-Duplex Flow Control Management Function Management Interface Console, Telnet , Web, SNMP **Port Configuration** Port disable/enable. Auto-negotiation 10/100Mbps full and half duplex mode selection. Flow Control disable / enable. Bandwidth control on each port Port Statistics Display each port's management status, link status and detail information about receive traffic **Bandwidth Control** In-band and out-band bandwidth control on each port Spanning Tree Function IEEE 802.1d Spanning Tree and IEEE 802.1w Rapid Spanning Tree IEEE 802.3ad Link Aggregation Supports 12 groups of 8 member ports maximum Static Route, RIPv1/v2, OSPF **IP Routing Protocol** Access Control List L2/L3/L4 ACL (Access Control List) support IEEE 802.1Q Tagged Based VLAN ,up to 512 VLAN groups VIAN **ARP** Configuration **MAC Address Security** Static MAC address / MAC address filtering QoS Traffic classification based on Port Number, 802.1p priority and DSCP field in IP Packet **IGMP Snooping** Allows to be disabled or enable. Port Mirroring Many-to-1 **DHCP Relay** Disable or enable Broadcast / Multicast / Destination lockup Failed storm control support **Broadcast Storm Control Standards Conformance** FCC Part 15 Class A, CE **Regulation Compliance** IEEE 802.3 10Base-T Standards Compliance IEEE 802.3u 100Base-TX IEEE 802.3z Gigabit 1000Base-SX/LX IEEE 802.3ab Gigabit 1000Base-T IEEE 802.3x Flow Control IEEE 802.3ad Port trunk with LACP IFFF 802 1d Spanning tree protocol IEEE 802.1w Rapid Spanning tree protocol IEEE 802.1p Class of service IEEE 802.1Q VLAN Tagging **Physical Specifications** Dimensions 430 x 43 x 250mm (W x H x D), 1U height Weight 3.11 KG **Environment Specifications** 

0 ~ 50 degree C

-40 ~ 70 degree C

20% ~ 85% (non-condensing)

20% ~ 90% (non-condensing)

Temperature:

Temperature:

Relative Humidity:

Relative Humidity:

**Data Sheet** 

Operating

Storage



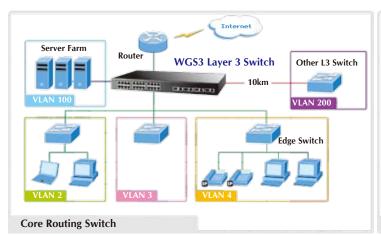
# **APPLICATIONS**

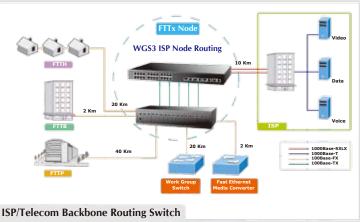
### **Core Routing Switch**

With 24 10/100Mbps ports, 4 Gigabit TP / SFP combo interfaces and Layer 3 IP/Multicast Routing capability, the WGS3-2840 provides a cost-effective and high-performance solution for Telecoms, Network Service Providers and enterprises.

#### Department Security and QoS Switch

With its 12.8 Gigabits per second and non-blocking switch fabric, the WGS3-2840 can easily provide a local, high bandwidth, and Gigabit Ethernet network for backbone of departments. With the four SFP ports, the WGS3-2840 provides the uplink to the backbone network through Gigabit Ethernet LX / SX SFP modules. With the security and QoS features, it improves the network to be remote efficient and protects the network clients.





WGS3-2840 24-Port 10/100Mbps + 4 Gigabit TP/ SFP combo Layer 3 Managed Ethernet Switch

# **AVAILABLE MODULES**

MGB-GT	SFP-Port 1000Base-T Module
MGB-SX	SFP-Port 1000Base-SX mini-GBIC module
MGB-LX	SFP-Port 1000Base-LX mini-GBIC module
MGB-L30	SFP-Port 1000Base-LX mini-GBIC module-30km
MGB-L50	SFP-Port 1000Base-LX mini-GBIC module-50km
MGB-L70	SFP-Port 1000Base-LX mini-GBIC module-70km
MGB-L120	SFP-Port 1000Base-LX mini-GBIC module-120km
MGB-LA10	SFP-Port 1000Base-LX (WDM, TX:1310nm) mini-GBIC module-10km
MGB-LB10	SFP-Port 1000Base-LX (WDM, TX:1550nm) mini-GBIC module-10km
MGB-LA20	SFP-Port 1000Base-LX (WDM, TX:1310nm) mini-GBIC module-20km
MGB-LB20	SFP-Port 1000Base-LX (WDM, TX:1550nm) mini-GBIC module-20km
MGB-LA40	SFP-Port 1000Base-LX (WDM, TX:1310nm) mini-GBIC module-40km
MGB-LB40	SFP-Port 1000Base-LX (WDM, TX:1550nm) mini-GBIC module-40km